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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,634	02/10/2004	Jon D. Pearson	JPA-1	1328

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EXAMINER

MAYO, TARA L

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,634

Applicant(s)

PEARSON, JON D.

Examiner

Tara L. Mayo

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20040210</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. Figures 3A and 3B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 through 3, 7 through 9 and 13 through 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Gordon (U.S. Patent No. 6,665,898 B2).

Gordon '898, as seen in Figures 3A, 3B, 4 and 7, shows an apparatus (24) for adjusting firmness, support, or sag of a mattress, comprising:
with regard to claim 1,

a substantially convex cross-sectional shape that is thicker in the center region and gradually thinner toward the edges;

a material and constitution for maintaining the convex shape under the weight of the mattress and a person; and

a set of dimensions large enough to adjust firmness, support, or sag for the majority of an area of the mattress used by the person;

with regard to claim 2,

wherein the apparatus comprises a substantially oval shape;

with regard to claim 3,

wherein the apparatus is inflatable to achieve adjustability to the level of firmness, support or sag;

with regard to claim 7,

a plurality of inflatable chambers (32B, 32C, 32D);

a substantially convex cross-sectional shape, after inflation, that is thicker in the center region and gradually tapered toward the edges;

an arrangement and shape of the chambers for maintaining the convex shape under the weight of the mattress and a person;

a set of dimensions large enough to adjust firmness, support, or sag for the majority of an area of the mattress used by the person; and

an adjustability of firmness, support, or sag controlled by degree of inflation of said chambers;

with regard to claim 8,

wherein the plurality of chambers are inflatable by way of at least one inflation opening;

with regard to claim 9,

wherein the plurality of chambers are separate, with each chamber inflatable by way of a separate inflation opening (col. 3, line 59 through col. 4, line 4);

with regard to claim 14,

wherein the apparatus is placed between a mattress and a box spring (col. 3, lines 18 through 21);

with regard to claim 15,

wherein the mattress is a king-size mattress (col. 3, line 34);

with regard to claim 16,

wherein the mattress is a queen-size mattress (col. 3, line 34);

with regard to claim 17,

wherein the mattress is a double-size mattress (col. 3, line 34); and

with regard to claim 18,

wherein the mattress is a twin-size mattress (col. 3, line 14).

With regard to claim 13, the method steps recited therein are inherent to the use of the device shown by Gordon '898.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3671

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 5, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon (6,665,898 B2) in view of Reeder et al. (U.S. Patent No. 6,460,209 B1).

Gordon '898 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claims 4 and 10,

baffles comprising a flexible material attached inside the apparatus to the top and bottom thereof, with shorter pieces of the flexible material located toward the edges and with longer pieces of the flexible material located in the center areas; and

with regard to claims 5 and 11,

a plurality of hollow chambers attached inside the apparatus attached to the top and bottom thereof, with shorter hollow chambers located toward the edges and with longer hollow chambers located in the center areas.

Reeder et al. '209, as seen in Figures 11 and 12, show an apparatus (96) for adjusting the firmness, support or sag of a mattress (52) including baffles comprising flexible material attached inside the apparatus to both the top and the bottom thereof preventing the further expansion of the apparatus at those points, with shorter pieces (218) of the flexible material located toward the edges to keep the edges thinner, and with longer pieces (218') of the flexible material located in the center areas to allow the center areas to expand thicker when

Art Unit: 3671

inflated (col. 22, line 64 through col. 23, line 34); and further comprising a plurality of hollow chambers attached inside the apparatus with shorter hollow chambers (224) located toward the edges and with longer hollow chambers (224') located in the center areas.

With regard to claims 4 and 10, it would have been obvious to one having ordinary skill in the art of mattress supports at the time the invention was made to modify the device shown by Gordon '898 such that it would include baffles as taught by Reeder et al. '209 to customize desired areas of support.

With regard to claims 5 and 11, it would have been obvious to one having ordinary skill in the art of mattress supports at the time the invention was made modify the device shown by Gordon '898 such that it would include hollow chambers as taught by Reeder et al. '209 to customize desired areas of support.

6. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon (6,665,898 B2) in view of Pepe (U.S. Patent No. 5,787,531 A).

Gordon '898 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claims 6 and 12,

separate inflatable chambers of varying diameters connected to form the convex shape, with chambers having a larger diameter arranged near a center of the apparatus and progressively smaller diameter chambers being arranged toward the edge thereof.

Art Unit: 3671

Pepe '531, as seen in Figures 8 and 9, shows an air mattress comprising a plurality of separate inflatable chambers (55) connected to form a convex shape, with chambers having a larger diameter arranged near the center of the mattress and chambers having progressively smaller diameters arranged toward the edge thereof to achieve constant pressure distribution over the length of the mattress (col. 2, lines 61 through 65).

With regard to claims 6 and 12, it would have been obvious to one having ordinary skill in the art of mattress supports at the time the invention was made to modify the device shown by Gordon '898 such that it would include inflatable chambers of varying diameter as taught by Pepe '531 to achieve constant pressure distribution over the length of the apparatus.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

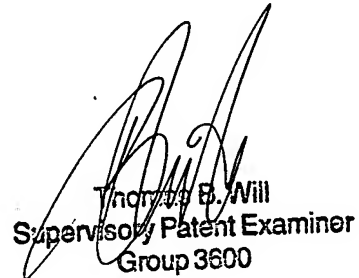
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 703-305-3019. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703-308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



27 October 2004



Thomas B. Will
Supervisory Patent Examiner
Group 3600